

Appl. No. 10/820,575  
Office Action dated June 16, 2008.

**In the Claims**

Claims 1-18 [canceled].

19. [Currently Amended] An apparatus comprising:

a container configured to provide a subject material in a substantially static state;

and

a plurality of sensors individually configured to monitor turbidity of the subject material, wherein the sensors are individually configured to monitor the turbidity using particulate matter of the subject material, and wherein the particulate matter monitored by one of the sensors is different than the particulate matter monitored by ~~an other~~ another of the sensors.

20. [Previously Presented] The apparatus according to claim 19 wherein the sensors are provided at different positions relative to the container to monitor the turbidity of the subject material at a plurality of vertical positions of the container.

21. [Previously Presented] The apparatus according to claim 19 wherein the sensors individually comprise:

a source configured to emit electromagnetic energy towards the container; and

a receiver configured to receive at least some of the electromagnetic energy.

Claims 22-48 [canceled].

Appl. No. 10/820,575  
Office Action dated June 16, 2006.

49. [Currently Amended] A turbidity monitoring method comprising:  
providing a container;  
providing subject material in a substantially static condition within the container;  
monitoring the turbidity of the subject material at a predefined vertical position  
within the container without displacing the subject material;  
generating a signal indicative of the turbidity of the subject material after the  
monitoring; and  
wherein the subject material comprises a fluid and particulate matter within the  
fluid, and wherein the monitoring comprises monitoring settling of the particulate matter  
within the fluid.

50. [Currently Amended] The method according to claim 49 further  
comprising simultaneously monitoring the turbidity of the subject material at another  
predefined vertical position within the container.

51. [Currently Amended] The method according to claim 49 wherein the  
monitoring comprises:  
emitting electromagnetic energy towards the subject material, the  
electromagnetic energy being not visible to humans; and  
receiving at least some of the electromagnetic energy.

52. [Original] The method according to claim 49 further comprising rotating  
the subject material during the monitoring.

Appl. No. 10/820,575  
Office Action dated June 16, 2006.

Claims 53-58 [canceled].

59. [Previously Presented] The method according to claim 49 wherein the monitoring comprises monitoring the turbidity of the subject material provided in the substantially static condition.

60. [Previously Presented] The apparatus according to claim 19 wherein the sensors individually monitor the turbidity of the subject material in the substantially static state.

Claims 61-62 [canceled].

63. [Previously Presented] The apparatus according to claim 19 further comprising a process chamber configured to receive and process a semiconductor workpiece using the subject material.

64. [Previously Presented] A sensor comprising:  
a source configured to emit electromagnetic energy towards a subject material;  
an initial receiver configured to receive at least some of the electromagnetic energy, the initial receiver being configured to generate a signal indicative of the turbidity of the subject material and responsive to the received electromagnetic energy;  
and